



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/552,098

10/04/2005

Joachim Droese

15192-000006/US/NP

4190

27572 7590 01/22/2010
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

HA, STEVEN S

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

01/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,098	Applicant(s) DROESE, JOACHIM	
	Examiner Steven Ha	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 8-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 23-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's response filed November 6, 2009 is acknowledged. Claims 1-32 remain pending. Applicant's arguments regarding the combination of Fissler (US 5,487,329) in view of Sollo (US 6,782,599) are persuasive, since the combination fails to teach calibrating the multi-part bottom following the connecting of the base body to the multi-part bottom. The previous grounds of rejection have been withdrawn; however, since new grounds of rejection are presented, **this action is made NON-FINAL.**

Claim Objections

1. Claim 1 is objected to because of the following informalities: In line 5, insert --,-- after the first instance of bottom. Appropriate correction is required.

Double Patenting

2. Claims 23-29 objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1-7. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1793

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Sollo (WO 00/66316).

Sollo teaches a method for producing cookware composed of a base body (flat member 2, see Fig. 4; Page 8, lines 10-16), and a multi-part bottom attached thereto (plate member 1 adhered to flat member 2, see Figs. 5 and 10; Page 6, 17-20), the multi-part bottom comprising a capsule (hole 7 in plate member 1, see Fig. 1; Page 7, lines 7-10) and an inlay received within the capsule (through the press stamping, a small amount of the material of flat member 2 will be plastically deformed into the holes 7 of plate member 1), said method comprising forming the base body as one integral piece (flat member 2, see Fig. 4; Page 8, lines 10-16), connecting the base body to the multi-part bottom (Page 10, 25-27), calibrating the multi-part bottom using a pressing device following the connecting of the base body to the multi-part bottom such that the multi-part bottom is bulged inwards with respect to the lower side thereof a predetermined distance (shaping takes place by a drawing of substantially normal type, operated using a matrix 18 and a drawing punch 19, see Fig. 7, and this process can be used to manufacture any kind of pot or pan that has a bottom portion 20 that is substantially plane or anyhow convex to avoid bulgings deriving from thermal strain; Page 15, line 13 – Page 14, line 3).

Though Sollo does not expressly teach the pressing device being a displacement controlled pressing device having a position control, it is the Examiner's position that

Art Unit: 1793

any pressing device that is subjecting an article to a predetermined amount of deformation would have some degree of displacement and position control; otherwise, the article being pressed would be destroyed if excessive pressure is applied by too much displacement of the press. Furthermore, if the press did not displace enough material, then the article may be incorrectly formed. Thus, one of ordinary skill in the art would appreciate that any pressing device necessarily requires a degree of displacement and position control.

Claim Rejections - 35 USC § 103

3. Claims 1 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollo (WO 00/66316) in view of Ash (US 4,254,650).

Sollo teaches a method for producing cookware composed of a base body (flat member 2, see Fig. 4; Page 8, lines 10-16), and a multi-part bottom attached thereto (plate member 1 adhered to flat member 2, see Figs. 5 and 10; Page 6, 17-20), the multi-part bottom comprising a capsule (hole 7 in plate member 1, see Fig. 1; Page 7, lines 7-10) and an inlay received within the capsule (through the press stamping, a small amount of the material of flat member 2 will be plastically deformed into the holes 7 of plate member 1), said method comprising forming the base body as one integral piece (flat member 2, see Fig. 4; Page 8, lines 10-16), connecting the base body to the multi-part bottom (Page 10, 25-27), calibrating the multi-part bottom using a pressing device following the connecting of the base body to the multi-part bottom such that the multi-part bottom is bulged inwards with respect to the lower side thereof a

Art Unit: 1793

predetermined distance (shaping takes place by a drawing of substantially normal type, operated using a matrix 18 and a drawing punch 19, see Fig. 7, and this process can be used to manufacture any kind of pot or pan that has a bottom portion 20 that is substantially plane or anyhow convex to avoid bulgings deriving from thermal strain; Page 15, line 13 – Page 14, line 3). However, Sollo does not expressly teach the displacement controlled pressing device having a position control.

If displacement control of the pressing device is not taken to be necessarily present, one of ordinary skill in the art would appreciate that displacement control is required for pressing devices, as taught by Ash. Ash teaches a method of drawing aluminum sheet metal blanks using an upper die member 214 and a lower or stationary die member 216 (see Figs. 5 and 6), which can be equated to the matrix and drawing punch of Sollo. Ash also teaches that position and displacement control are essential to creating the correct part. If the displacement is too great, the aluminum material may crack (col. 3, lines 50-66) and if the displacement is too little, the material does not conform to all of the male surfaces of the stationary die (col. 3, line 65 - col. 4, line 2).

In view of Ash's teachings, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Solo to include the displacement controlled pressing of Ash because too much or too little displacement can cause an undesired product to form.

***NOTE:** Examiner appreciates that the Applicant's disclosed invention is drawn to connecting an already formed base body to a multi-part bottom and then calibrating **only** the multi-part bottom of the article. However, the current claim language does not

Art Unit: 1793

preclude calibrating (deforming) both the base body and the bottom simultaneously (as is the case in Sollo).

4. Claim 1, 6, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fissler (US 5,487,329) in view of Sollo (WO 00/66316), and further in view of Ash (US 4,254,650).

Regarding claims 1 and 23, Fissler teaches a method for producing cookware composed of a base body (container base, 4, Fig. 1; col. 4, lines 35-44) and a multi-part bottom attached thereto (covering base, 7, with recesses, 8, and filling pieces, 9, Figs. 2-3; col. 4, lines 45-59), the multi-part bottom comprising a capsule (covering base recesses, 8, Figs. 2-3; col. 4, lines 45-59) and an inlay (covering base filling pieces, 9, Figs. 2-3; col. 4, lines 45-59) received within the capsule, said method comprising forming the base body as one integral piece (round container, 2, with container casing, 3, and container base, 4, Fig. 1; col. 4, lines 35-44), connecting the base body (container base, 4, Fig. 1; col. 4, lines 35-44) to the multi-part bottom (covering base, 7, with recesses, 8, and filling pieces, 9, Figs. 2-3; col. 4, lines 45-59), and a calibrated multi-part bottom that is bulged inwards with respect to the lower side thereof a predetermined distance (preferably a covering base cold bottom geometry which is slightly concave; col. 3, lines 21-38).

However, Fissler is silent to teaching calibrating the multi-part bottom using a displacement controlled pressing device having a position control.

Sollo teaches a method for producing cookware composed of a base body (flat member 2, see Fig. 4; Page 8, lines 10-16), and a multi-part bottom attached thereto (plate member 1 adhered to flat member 2, see Figs. 5 and 10; Page 6, 17-20), the multi-part bottom comprising a capsule (hole 7 in plate member 1, see Fig. 1; Page 7, lines 7-10) and an inlay received within the capsule (through the press stamping, a small amount of the material of flat member 2 will be plastically deformed into the holes 7 of plate member 1), said method comprising forming the base body as one integral piece (flat member 2, see Fig. 4; Page 8, lines 10-16), connecting the base body to the multi-part bottom (Page 10, 25-27), calibrating the multi-part bottom using a pressing device following the connecting of the base body to the multi-part bottom such that the multi-part bottom is bulged inwards with respect to the lower side thereof a predetermined distance (shaping takes place by a drawing of substantially normal type, operated using a matrix 18 and a drawing punch 19, see Fig. 7, and this process can be used to manufacture any kind of pot or pan that has a bottom portion 20 that is substantially plane or anyhow convex to avoid bulgings deriving from thermal strain.

One of ordinary skill in the art would appreciate that the teachings of Sollo can be used as a general teaching for calibrating a multi-part bottom using a pressing device following the connecting of a base body to a multi-part bottom.

In view of Sollo's teachings, it would be obvious to one of ordinary skill in the art at the time of the invention to look to the teachings of Sollo in order to calibrate a multi-part bottom using a pressing device following the connecting of a base body to a multi-part bottom.

Though the combination of Fissler and Sollo is silent to the pressing being a displacement controlled pressing device having a position control, it is the Examiner's position that any pressing device that is subjecting an article to a predetermined amount of deformation would have some degree of displacement and position control; otherwise, the article being pressed would be destroyed if excessive pressure is applied by too much displacement of the press. Furthermore, if the press did not displace enough material, then the article may be incorrectly formed. Thus, one of ordinary skill in the art would appreciate that any pressing device necessarily requires a degree of displacement and position control.

If displacement control of a pressing device is not taken to be necessarily present, one of ordinary skill in the art would appreciate that displacement control is required for pressing devices, as taught by Ash. Ash teaches a method of drawing aluminum sheet metal blanks using an upper die member 214 and a lower or stationary die member 216 (see Figs. 5 and 6), which can be equated to the matrix and drawing punch of Sollo. Ash also teaches that position and displacement control are essential to creating the correct part. If the displacement is too great, the aluminum material may crack (col. 3, lines 50-66) and if the displacement is too little, the material does not conform to all of the male surfaces of the stationary die (col. 3, line 65 - col. 4, line 2).

In view of Ash's teachings, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Fissler and Solo to include the displacement controlled pressing of Ash because too much or too little displacement can cause an undesired product to form.

Regarding claims 2 and 24, Fissler teaches that the multi-part bottom (covering base, 7, with recesses, 8, and filling pieces, 9, Figs. 2-3; col. 4, lines 45-59) is mechanically reinforced (attached to plate 5, see Fig. 1). Additionally, work hardening occurs during calibration of the bottom, which also provides for mechanical reinforcement.

Regarding claims 6 and 28, Fissler teaches connecting the base body (container base, 4, Fig. 1; col. 4, lines 35-44) to the multi-part bottom (covering base, 7, with recesses, 8, and filling pieces, 9, Figs. 2-3; col. 4, lines 45-59) via soldering (col. 3, lines 50-55).

Regarding claims 7 and 29, Fissler is silent to calibrating and connecting the base body and bottom in one step.

Sollo teaches connecting the base body and the bottom via press-stamping of the plate member 1 on disc 2 (Page 10, lines 25-27) and then calibrating the bottom via drawing using a matrix and a drawing punch (Page 15, line 13 – Page 14, line 3). One of ordinary skill in the art would appreciate that since the drawing punch can act as a stamper to connect the base body to the bottom, and then calibrate the formed bottom. This reduces the number of steps, thereby saving time and speeding up the process.

In view of Sollo's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fissler to include the

Art Unit: 1793

teachings of Sollo. One of ordinary skill in the art would appreciate that since the drawing punch can act as a stamper to connect the base body to the bottom, and then calibrate the formed bottom. This reduces the number of steps, thereby saving time and speeding up the process.

Regarding claim 30, Fissler teaches wherein the cookware is a pot (col. 1, lines 5-7).

Regarding claim 31, Fissler is silent to wherein said forming the base body is by deep-drawing.

Sollo teaches drawing (shaping takes place by a drawing of substantially normal type, operated using a matrix 18 and a drawing punch 19, see Fig. 7; Page 15, line 13 – Page 14, line 3). The drawing is advantageously simple because it only applies one pressing regardless of the shape of the vessel to be produced (Page 15, lines 24-26).

In view of Sollo's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fissler to include the teachings of Sollo because a toggle press only applies one pressing regardless of the shape of the vessel to be produced (Page 15, lines 24-26).

Regarding claim 32, Fissler is silent to wherein the pressing device is a toggle press.

Sollo teaches a toggle press (shaping takes place by a drawing of substantially normal type, operated using a matrix 18 and a drawing punch 19, see Fig. 7; Page 15, line 13 – Page 14, line 3). The drawing is advantageously simple because it only applies one pressing regardless of the shape of the vessel to be produced (Page 15, lines 24-26).

In view of Sollo's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fissler to include the teachings of Sollo because a toggle press only applies one pressing regardless of the shape of the vessel to be produced (Page 15, lines 24-26).

6. Claims 3-5, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fissler and Sollo, as applied to claims 1 and 23 above, and further in view of Chatterton et al. (US 6,149,053).

Regarding claims 3 and 25, the combination of Fissler and Sollo is silent to reinforcing ribs stamped into the lower side of the multi-part bottom.

Chatterton et al., hereinafter referred to as "Chatterton," teaches ribs that are stamped to the bottom of a pan in order to increase the bend strength (col. 1, ln 39-43).

In view of Chatterton's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Fissler and Sollo, stamping ribs onto the lower side of the bottom in order to add extra bend strength to the cookware for mechanical reinforcement.

Art Unit: 1793

Regarding claims 4 and 26, the combination of Fissler and Sollo is silent to stamping the plurality of reinforcing ribs in a position controlled manner.

Chatteron et al. teaches ribs that are stamped to the bottom of a pan in order to increase the bend strength (col. 1, ln 39-43).

Though Chatteron et al. is silent to the specific manner, it follows from stamping ribs that the process must be position controlled in order to achieve the appropriate size and depth of ribs. Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to include, with the method as detailed by Fissler and Sollo, stamping ribs in a position controlled manner to provide reinforcing ribs that increase the bend strength.

Regarding claims 5 and 27, the combination of Fissler and Sollo teaches press stamping as discussed above, but is silent to simultaneously calibrating and stamping the reinforcing ribs into the multi-part bottom.

Chatteron et al. teaches ribs that are stamped to the bottom of a pan in order to increase the bend strength (col. 1, ln 39-43).

In view of Chatterton's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Fissler and Sollo to include the teachings of Chatteron. Since the stamped ribs of Chatteron help reinforce the resultant pan, and press-stamping is known to help reinforce the resultant product, it would be obvious to simultaneously press-stamp the ribs while calibrating the

Art Unit: 1793

bottom to simplify manufacturing steps and decrease the time it takes to produce the product.

Response to Arguments

7. Applicant's arguments, see Page 8, lines 12-15, filed November 6, 2009, with respect to the rejection(s) of claim(s) 1-2, 6, 23-24, 28, and 30-32 under Fissler (US 5,487,329) and Sollo (US 6,782,599) have been fully considered and are persuasive. The previous combination of Fissler (US 5,487,329) and Sollo (US 6,782,599) fails to teach calibrating the multi-part bottom following the connecting of the base body to the multi-part bottom. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Fissler (US 5,487,329), Sollo (6,702,140), and Ash (US 4,254,650) and a separate rejection is presented in view of Sollo (6,702,140) and Ash (US 4,254,650). See rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Ha whose telephone number is (571)270-5934. The examiner can normally be reached on Monday - Thursday 8:30 - 6 & Alternate Fridays 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Ward can be reached on 571-272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven Ha/
Examiner, Art Unit 1793
January 14, 2010

/Jessica L. Ward/
Supervisory Patent Examiner, Art Unit 1793